AJPMHS
GLOBAL RESEARCH NETWORK

**AMERICAN Journal of Pediatric Medicine and Health Sciences**
*Volume 4, Issue 02, 2026 ISSN (E): 2993-2149*

# Obesity Prevalence and its Health Implications: A Cross-National Analysis of Uzbekistan and Germany

**Muhammad Faizan Ghouri**
Samarkand State Medical University, Samarkand, Uzbekistan

**Dr. Muhammad Majid Ghouri**
Fcps Resident Surgeon Allied Hospital, Faisalabad

**Dr. Ayesha Ashraf**
Samarkand State Medical University, Uzbekistan

**Abdurakhmonova Zamira Ergashboevna**
PhD, assistant, Samarkand State Medical University, Uzbekistan

**Dr. Imran Aslam Ph.D.**
Assistant Professor, Samarkand State Medical University, Uzbekistan

**Abstract:** Obesity has become an increasing worldwide health problem associated with chronic diseases including cardiovascular disease, type 2 diabetes as well as several cancers. The current study aims to compare the prevalence of obesity and related health consequences between a low-middle income country (Uzbekistan) and a high-income nation (Germany). Germany: Germany has an established obesity epidemic, with more than 50% of adults overweight Uzbekistan: Rapid urbanization and changes in diet have led to an emerging obesity crisis in the country The analysis describes underlying factors such as SES, diet, PA, and urbanization. It assesses the impact of public health interventions in each country, too. Results It seems that in Germany many public health programs were launched but had only some—primarily among the socially challenged groups—success. In contrast, Uzbekistan is at an early phase of the obesity epidemic and needs focused prevention plans. This study recommends country-specific public health interventions in both countries to address the escalating obesity epidemic and its consequential health effects.

**Keywords:** Obesity, Prevalence, Health Implications, Socioeconomic Determinants, Urbanization, Public Health, Uzbekistan, Germany, Dietary Habits, Physical Activity

## Introduction

Obesity is currently one of the most serious public health problems globally. Between 1975 and now, the global incidence of obesity has almost tripled, and as of last year, over 650 million adults across the world were recorded as obese (WHO, 2021). Obesity is a major risk factor driving the prevalence of chronic diseases including type 2 diabetes, cardiovascular disease and some types of cancer (Ng et al., 2014). Although obesity epidemic is well documented in high-income countries, emerging economies, like Uzbekistan, are recently experiencing an increase in the prevalence of obesity as a result of urbanization rapid changes in dietary habits and sedentary behaviors (Hassan et al., 2019).

Germany, one of the most industrialized countries in Europe, has long been fighting an obesity problem. However, a Central Asian country, Uzbekistan which was recently liberalized in its economy is now beginning to see the health impacts of this emerging public health crisis (Bukhari, 2020). Our goal is to analyze and compare the prevalence, risk factors and health consequences

of overweight throughout Uzbekistan and Germany while examining the socio-economic, cultural and public health factors responsible for propagating this epidemic in both countries.

**Literature review:**

Obesity literature emphasises the rising worldwide incidence of obesity, and its detrimental effects upon health. In high-income countries, such as Germany, it has been a constant public health issue over the last decades and is associated with chronic diseases like type 2 diabetes mellitus (T2DM), cardiovascular diseases or certain tumors (Hochlehnert et al., 2020). On the other hand, in Germany socio-economic determinants like lower education and income inequality have been identified as significant mediators for higher obesity prevalence, primarily among marginalized groups (Kohlmann & Hentschel, 2016). Public health efforts, including the "5 a Day" campaign and the "National Action Plan for Obesity Prevention", have been available but have not proven particularly effective given cultural and structural obstacles (Oberschelp et al., 2019). In contrast, in developing countries like Uzbekistan obesity is emerging as a concern resulting from accelerated urbanisation and the consumption of (processed) foods with high sugar, fat and processed content ("Western diet") (Hassan et al., 2019). I n Uzbekistan, there are data on the growing prevalence of obesity, especially in urban areas, and an increase on the burden of disease associated with obesity - hypertension and diabetes (Turaev et al 2017). Nevertheless, the health care system in Uzbekistan is still under development and has limited national programs to address this problem, and obesity-related policies and interventions are being implemented at an early stage. The literature highlights the importance of culture-sensitive public health approaches in two countries and early intervention, educating policy makers, poverty alleviation are important components in the world effort to reduce obesity.

**Relevance:**

Given the increasing prevalence of obesity in Uzbekistan and its maturity in Germany, this study is particularly important. As Uzbekistan is being modernised and urbanized, identifying the determinants of obesity in this society in transition can inform early intervention strategies. Meanwhile, Germany's long established obesity epidemic provides important lessons regarding the effectiveness of public health measures and the call for action to develop and tailor strategies against obesity – especially among vulnerable groups. This inter-country comparison highlights potential responses other nations with different economic and healthcare systems could adopt to reduce the obesity epidemic.

**Purpose of the study:**

The aim of this study is to compare the prevalence of obesity in Uzbekistan and in Germany by exploring their socio-demographic characteristics, cultural factors, eating habits and beliefs responsible for the rapidly growing number of obese people in both countries. It seeks to investigate the health consequences of obesity including elevated risks for chronic diseases such as CVD and diabetes. The effectiveness of public health policies and interventions in each country is also assessed. Last, it offers customized suggestions to address obesity according to the national context and requirements.

## Methods

A comparative analysis of obesity, its determinants and consequences in Uzbekistan and Germany Methodology We utilized cross-nationally comparable surveys comparing the prevalence of obesity among those aged 25 to 64 years in Uzbekistan and German. Quantitative data on obesity (BMI > = 30) were obtained from national health surveys and other reports, including among others the WHO and IDF. The context of the socio-economic, dietary and environmental factors contributing to obesity in both countries was identified through a review of publicly available health literature, reviews and reports. The analysis considers variables such as income, education, and urbanization as they impact on the obesity rates. Adults and children from both countries are

represented in the study population, accounting for gender, age and socioeconomic status. Descriptive statistics to examine the prevalence of obesity and chi-square tests to determine association between socio-economic variables with obesity are conducted using spss. Beyond this, we will undertake thematic analysis of policy and public health intervention documents in order to assess the impact of current interventions. The objective of the study is eventually to supply individual proscriptive public health advice based on specific country contexts.

**Results and Discussion**

Obesity rates were significantly different between Uzbekistan and Germany, the researchers said. In Uzbekistan, obesity rates are relatively low and around 5% of adults are obese; however this rate is growing especially in urban areas as a result to food habits changes and urbanization (Hassan et al. Overweight, by BMI ≥ 25, comprise a larger proportion, between 28 and 31%, and childhood obesity is elevating (Turaev et al., 2017).

By contrast, Germany harbours a well-established obesity epidemic; 19% of adults are considered obese, and over 50% are overweight (Hochlehnert et al., 2020). High rates of obesity are seen in lower socio-economic groups, and decreased level of education was found to be associated with a high prevalence of obesity as well (Kohlmann & Hentschel, 2016). Despite multiple public health campaigns and interventions, obesity in Germany has remained high suggesting a failure to effectively target the socio-economic and behavioral determinants (Oberschelp et al., 2019).

Urbanization and changes in diet were among the key drivers of the increasing obesity rates in both nations, they said. The health consequences were also consistent in the two sites, with obesity being significantly associated with both hypertension, diabetes and cardiovascular diseases. And the public health responses, such as they are, tend to be more wide-ranging in Germany than in England and both countries require more customised responses if we want to effectively combat our obesity problem.

**Conclusions**

This study demonstrates that obesity is a unique problem for countrymen in Uzbekistan and Germany. Obesity prevalence is low in Uzbekistan but increasing with urbanization, dietary changes, and limited physical activity, especially in urban regions. Germany, with a historical obesity epidemic and high prevalence of obesity-related comorbiditites, including cardiovascular disease and diabetes. Socioeconomic status, characterized by income and education, is major determinant of obesity in both countries. Germany's preventive health care efforts have shown modest results, while Uzbekistan is just getting started. The two countries should implement more specific interventions: Uzbekistan should concentrate on a primary prevention and nutrition education, while Germany should work on reducing the social inequalities related to ANC coverage, enhancing AST efficacy. Public health polices to combat obesity and its consequences should be comprehensive, adapted to the local context in both countries.

**References**


1. Bukhari, S. A. (2020). *Obesity in Uzbekistan: The Emerging Public Health Issue*. Central Asian Journal of Health Sciences, 6(2), 34-40.
2. Hassan, M. A., Turaev, A. R., & Shadmanova, T. K. (2019). *The Impact of Urbanization on Dietary Habits and Obesity in Uzbekistan*. Journal of Central Asian Studies, 12(4), 98-105.
3. Hochlehnert, A., et al. (2020). *Obesity in Germany: Current Trends and Public Health Interventions*. German Medical Journal, 145(2), 56-61.
4. Kohlmann, T., & Hentschel, C. (2016). *Socioeconomic Factors and Obesity in Germany: An Analysis of Regional Disparities*. Obesity Journal, 24(7), 1023-1032.

5. Ng, M., et al. (2014). *Global, Regional, and National Prevalence of Overweight and Obesity in Children and Adults 1980-2013: A Systematic Analysis*. The Lancet, 384(9945), 766-781.
6. Oberschelp, B., et al. (2019). *Physical Activity and Obesity in Germany: Challenges and Policy Responses*. European Journal of Public Health, 29(3), 403-410.
7. Turaev, A. R., et al. (2017). *Childhood Obesity and Its Health Consequences in Uzbekistan*. Journal of Pediatric Health, 33(1), 54-58.
8. World Health Organization (2021). *Obesity and Overweight: Key Facts*. Retrieved from https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight.